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AMENDMENTS TO THE SPECIFICATION:

Please delete the paragraph beginning at page 1, line 19 and replace with the following paragraph:

As is known in the art, there is a trend to provide network processors that perform cryptographic processing of network packets. To facilitate the cryptographic processing, the network processors include cryptographic acceleration units (also referred to as "crypto units"). The crypto units accelerate the cryptographic processing of packet data to support cryptographic processing at network line rate. One example of a network processor including such a crypto unit is the INTEL® ~~Intel~~ IXP2850 network processor manufactured by Intel Corporation.

Please delete the paragraph beginning at page 2, line 19 and replace with the following paragraph:

Known security protocols such as IPSEC provide ~~that~~ part of the data in a network packet that is subject to ciphering and authentication, while another part of the data is subject only to authentication. The data that is subject only to authentication generally appears at the beginning of the packet. Other security protocols have a similar requirement that part of the data in a network packet is subject to ciphering and authentication, while another part of the data is subject only to authentication.

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Please delete the paragraph beginning at page 2, line 26 and replace with the following paragraph:

It should be appreciated that different security protocols can have different size headers associated with a network packet and that the amount of data subject to authentication only is not ~~necessary~~ <u>necessarily</u> a multiple of the block size of the cipher and/or authentication algorithm.

Please delete the paragraph beginning at page 10, line 25 and replace with the following paragraph:

In one particular embodiment, the authentication buffer 70 is implemented as an 80-byte circular FIFO using byte-writeable register files. Register files allow new network packet data to be written into the authentication buffer 70 byte-by-byte as they arrive without having to shift the data through ~~the~~ <u>an</u> accumulation buffer ~~70~~.